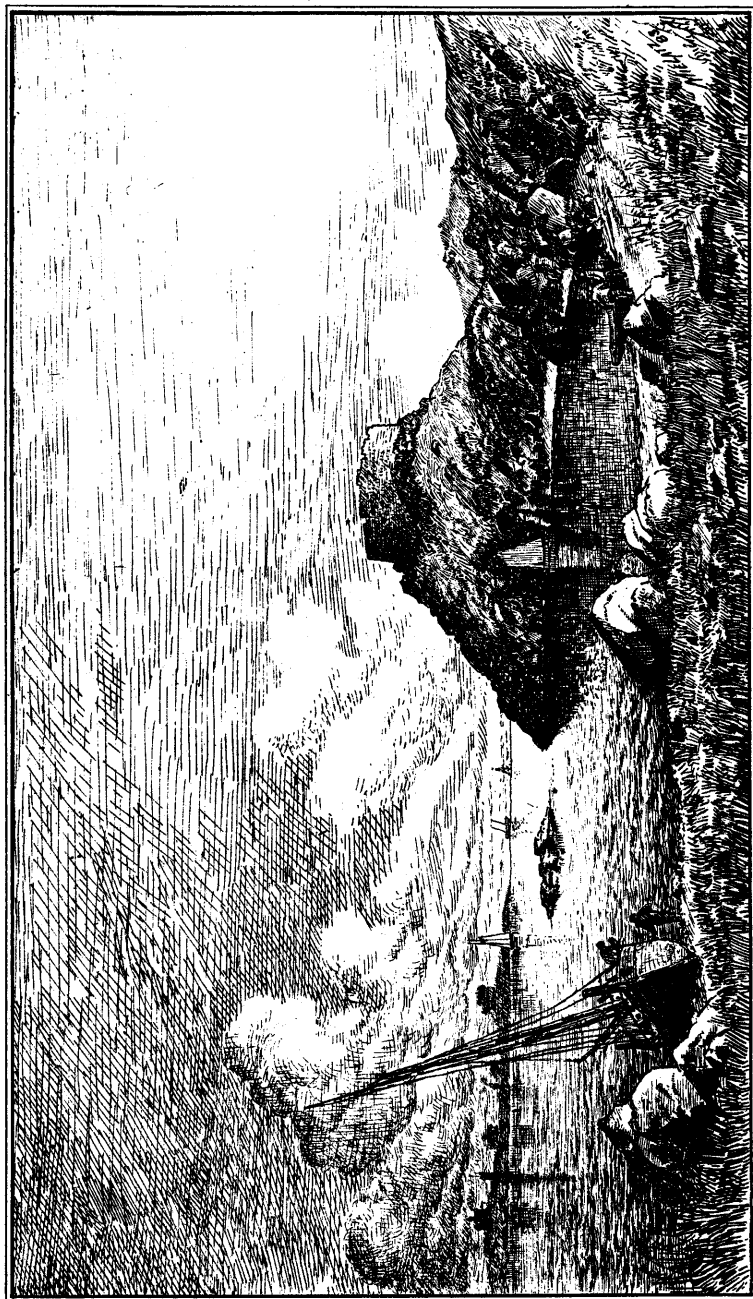




THE DUMPLINGS TOWER.

HISTORICAL SKETCH
OF THE
FORTIFICATION DEFENSES
OF
NARRAGANSET BAY
SINCE THE
FOUNDING, IN 1638,
OF THE
COLONY OF RHODE ISLAND.

BY
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HISTORICAL SKETCH
OF THE
DEFENSES OF NARRAGANSET BAY, RHODE ISLAND.

ROGER WILLIAMS, the great and good man who initiated the Christian Colony of Rhode Island in 1636, was so just in all his dealings with the native Indian Tribes, that peace and good will reigned for many years within its borders. But, after the beheading of Charles I., the government of England being in a very unsettled condition and much discord existing among the people of the Colony, it was ordered, in 1650, that all of its arms should be thoroughly repaired and that each town of the Colony should be required to build a magazine.

When a new war broke out between the Narraganset and Long Island Indians, the people of Providence became alarmed by some hostile demonstrations, and, therefore, in 1656 erected a fort on Stamper's Hill. It was so called because that, soon after the settlement of Providence, when a body of Indians approached the town in a threatening manner, the inhabitants, by running and *stamping* on this hill, made the hostiles believe that they were greatly outnumbered. The ruse had its desired effect, the Indians quickly retiring. This fort was probably the first ever erected by the colonists in Rhode Island.

The war of 1664, between England and Holland, during which the Dutch settlements in America were captured by the British aided by the Colonists, showed the necessity of sea-coast protection against armed cruisers; hence, in 1666, Rhode Island petitioned the home government to erect fortifications for the defense of Narraganset Bay. The report that a Dutch fleet was on its way, in 1667, to recover New York, produced great alarm in the Colonies. Hence the General Assembly of Rhode Island took every precautionary measure for defense, and recommended that Newport should mount great guns for its protection; but no permanent fortifications appear to have been then erected.

During King Philip's war of 1675-'76, inland stockades and earth-works were constructed, but no sea-coast fortifications.

In 1690, the year in which James II. was defeated at the battle of the Boyne in Ireland, a French fleet having made its appearance off our coast, some of the seaports were put in a state of defense by temporary batteries. No permanent works, however, could have been erected in Rhode Island, for, in answer to the rebuke of the mother country that the Colony "had not supplied her quota of men and money in aid of the King," the Assembly, in 1696, stated "that the exposed condition of Rhode Island, with forty miles of coast line and three great inlets from the sea *undefended*, had demanded all her strength for self-protection."

The treaty of Ryswick having restored peace to all Europe, October 30, 1697, there seemed to be no pressing necessity for fortifications in Narraganset Bay. This general pacification, however, was of short duration, hence it was deemed prudent to provide for the defense of Newport harbor by erecting an earthwork on Goat Island.*

The Earl of Bellomont, a man of singular ability and strength of character, had been appointed by King William III., March 16, 1697, "to be Governor of the Provinces of New York, Massachusetts Bay, and New Hampshire, and to be Captain-General, during the war, of all of His Majesty's forces, both there and in Connecticut and Rhode Island." The latter Colony he visited in 1699, and January 10, 1700, the Lords of Trade made a report to the King on the Forts in the Plantations, in which they say "Rhode Island being the most important place on the south-west side of Cape Codd, is so situated as to be a very convenient harbour for shipping and security to that part of the

*CACHANAQUAT, a Chief Sachem of the Narraganset Indians, sold to Governor Benedict Arnold and James Greene, May 22, 1658, three small islands in the Bay, *Nuntee-Sinunk* alias Goat Island, *Weenat-Shasitt* alias Coaster's Harbor Island, and Dyer's Island, for six pounds and ten shillings. Greene, May 27, 1672, transferred to Arnold his entire claim to enable the latter "to pass over his right in ye sayd two islands (Goat and Coaster's Harbor) unto ye Town of Newport if they will pay him ten pounds in current pay for the six pounds and ten shillings which he disbursed yeares agoe on ye acmpt." The Town of Newport, May 1, 1673, made the purchase of these islands from Arnold.

The middle part of Goat Island was reserved for the fortifications, and the two ends, containing about ten acres, were laid out in forty-three building lots. After the Revolution (1794) the State of Rhode Island transferred to the United States the existing fortifications and the land occupied by them; and, April 16, 1799, the Town of Newport sold to the United States, for \$1,500, the remainder of the island, no payment, up to that time, having been received from the purchasers of the lots on the two ends.

The Breakwater and Lighthouse Pier, running from the north end of Goat Island, was built by Captain (now General) Cullum, in 1836-'38, and a part of the superstructure and Lighthouse were completed by Lieutenant James L. Mason, of the United States Corps of Engineers. On Henry Jackson's Historical Map in the Redwood Library, Newport, R. I., it is stated that they were constructed by Alex. M. McGregor, who was only the master mason.

Country in case it were put in a state of defense, which *it has never yet been*, by the mean condition and refractoryness of the inhabitants," and "recommend an appropriation of £150 for fortifications for Rhode Island and Providence Plantations."

Doubtless, in consequence of this report, Colonel William Wolfgang Romar, "His Majesty's Chief Engineer," was sent to examine Narraganset Bay; for, June 22, 1700, the Earl of Bellomont says to the Lords of Trade: "I send your Lordships Coll. Romar's Memorial (marked H), which I have turned into English, wherein he gives so particular an Account of the principal Rivers, Bays, and places fit to be fortified, that there is little to be said or remarked by me."

The small appropriation of £150 for fortifying Rhode Island waters, probably did not supply more than enough for an earthen battery on Goat Island, Newport harbor, the first notice of which is to be found in a bill, passed May 7, 1701, by the Assembly of Rhode Island, to sustain the governor in enforcing the navigation act, which provided that "the commander of the fort to be appointed by the governor" should have power to bring to any inward bound vessel by the usual mode of firing "a shot afore her foremast," &c. This small earthen battery (probably thrown up in 1700) the first erected on Goat Island, being found inadequate for the defense of the harbor, a new one was ordered to be constructed, May 6, 1702, by the Assembly which enacted: "That for the better defense of his Majesty's interest and good subjects, against the public enemy that shall endeavour to invade or assault his Majesty's subjects in this Collony, there shall be a fortification or battery built at the charge of the Collony, in such convenient place near the harbour of Newport, sufficient to mount twelve pieces of ordnance or cannon." This was a small work, but it must be remembered that the population of the Colony did not then exceed ten thousand.

Though "*his* Majesty," William III., had died, March 8, 1702, over eight weeks before this enactment, the news had not then reached the Colony. As soon, however, as the new work was completed, it took the name of Fort Anne, after the queen of England, who succeeded William III. Subsequently it was much enlarged by appropriations made from time to time by the Assembly. When peace was restored to the world, in 1714, by the Treaty of Utrecht, its garrison was disbanded.

Upon the accession of George II. to the British throne, June 10, 1727, Rhode Island voted an address to His Majesty, in which it is stated that "a regular and beautiful fortification of stone with a battery" had been built at Newport, capacious enough for mounting fifty cannons, which His Majesty was asked to supply.* Not till three years later was its name of Fort Anne, which it had borne through two reigns, changed to Fort George, a designation which it retained till the outbreak of the Revolution, when, and until 1784, it was called Fort Liberty. This work was completed in 1735, though not fully armed, its cost having amounted to £10,000 in the depreciated currency of the Colony.

War having been declared in 1739 between England and Spain, the Assembly of Rhode Island ordered Fort George to be repaired and furnished, without delay, with ammunition and suitable guns; and, in 1740, watch towers were directed to be placed on Point Judith, Castle Hill, Brenton's Point, Sachuest Point, and "on Conanicut Island," to transmit intelligence of every hostile demonstration.

Soon after, January 27, 1741, pending the second war with Spain and in anticipation of hostilities with France, the Assembly of Rhode Island directed the battery at Fort George to be enlarged so as to mount ten or more additional cannon. In 1749, the work was reported to be provided with twenty-five guns in the lower battery and twelve cannon on platforms.

The war of England against Spain and France now extended to both hemispheres, and the colonies were required to do their part on this continent. Rhode Island had her share in the colonial expedition of 1745 against Cape Breton under William Pepperell, afterwards knighted for his brilliant capture of the strong and costly fortress of Louisburg. The year after, Rhode Island was to have taken part in the fourth attempt against Canada; but the public mind was soon to be diverted from schemes of conquest to the more imminent necessity of defense against the great armada with which France threatened to retake Louisburg and conquer New England. The greatest alarm pervaded the colonies, and the Assembly of Rhode Island, convened in extra session,

*Some of these guns were subsequently supplied through the influence of Sir Charles Wager, who was First Lord of the Admiralty in the ministry of Sir Robert Walpole.

ordered that a new battery be added to Fort George, a large garrison be provided, and an ample supply of ammunition be procured for the work.

Upon the news of the armistice between the belligerent powers, which preceded the conclusion of the Peace of Aix-la-Chapelle in 1748, the garrison of Fort George was disbanded; but a few years later the work had again to be prepared for the renewal of hostilities between England and France on the question of the boundaries of their North American possessions.

The "Old French War" followed, during which Braddock was defeated, Fort William-Henry captured, Abercrombie repulsed at Ticonderoga, Fort Du Quesne taken, and Canada conquered. In this long struggle the Colonies materially aided the mother country, besides providing for the defense of their Lake and Atlantic coasts. No point along the latter was more important than Narraganset Bay. Hence Fort George was fully repaired and almost rebuilt by liberal appropriations made by the Assembly of Rhode Island. In 1761, this work was reported, with "twenty-six mounted guns," to be in excellent fighting order.

The Peace of Paris, in 1763, thanks to the genius of Chatham and the valor of Wolfe, had transferred all of French North America to Great Britain; but this colossal contribution to the power of the latter was attended with consequences which were destined to wrench an empire from exulting Albion. In the nine years' contest, which had just terminated, the Colonies had realized their military prowess, became acquainted with the customs of martial life, were taught to endure the hardships of the camp, had learned the stern lessons of self-sacrifice, became habituated to discipline and to confidence in themselves, and, though sometimes defeated and thrown to the ground, Antæan-like they rose renewed in their strength for new contests.

Only two years had elapsed after the Peace of Paris before ungrateful Britain began that series of oppressions which culminated in American independence. Of that attractive history we must limit ourselves to narrating the heroic part taken by little Rhode Island on the shores of Narraganset Bay. The first act of its open resistance was a *mêlée*, July 9, 1764, between a boat's crew of the British schooner *St. John* attempt-

ing to carry off an alleged deserter from Newport, which was forcibly resisted, and led to the seizure by the town's people of Fort George, whose guns were trained upon the Admiral's ship—the Squirrel—against which eight shots were fired. The next year a mob of sailors took possession of and destroyed one of the boats of the English ship of war—Maidstone—engaged in impressing seamen in Newport harbor; then, in 1769, came the scuttling of the British armed sloop—Liberty—and the dragging of her boats in triumph through the streets of Newport; and, three years later, the Gaspée was captured and burned by armed Rhode Islanders in the upper part of Narraganset Bay. All of these daring acts took place long before the battle of Lexington opened, in 1775, the grand drama of the American Revolution.

Forséeing that the die must soon be cast, the Assembly of Rhode Island, December 5, 1774, ordered the dismantling of Fort George to prevent its use by the enemy, and for safety removed to Providence its forty cannon and a large supply of ammunition. Batteries were erected also on Fox, Sassafras, Field, Kettle, and Bullock's Points, to defend Providence river; upon the west side and southern end of Popasquash Neck to guard the passage between it and Prudence Island; and upon the southern extremity of Warwick Neck to command the entrance to Greenwich Bay. In quick succession, other places were so protected as to guard against the aggressions of British ships, whose crews were burning houses and barns, plundering the islands and shores, keeping the watch-worn inhabitants in constant alarm, and even threatening to destroy Newport. Such were these depredations that the Continental Congress was memorialized to protect Rhode Island with its one hundred and thirty miles of coast-line and two navigable rivers exposed to the enemy.

Early in 1776, the Marine Committee of Congress, by active exertions and at great expense, had fitted out a squadron of eight vessels, mounting over one hundred guns, which sailed upon a cruise under Commodore Hopkins of Rhode Island. He had been very successful in making captures; and, being desirous of obtaining a supply of powder, then very scarce, he made a descent upon Nassau, New Providence, the capital of the Bahama Islands, captured its two forts with over an hundred cannon and a large amount of military stores, besides taking

many prisoners of war, including the governor and lieutenant-governor. On his return, he encountered a British frigate of twenty guns, off Block Island, which escaped from him and ran into Newport harbor. This was the signal for the British fleet to go out in pursuit of the audacious Commodore. The night after, April 6, 1776, a slight battery was thrown up on Brenton's Point and armed with several pieces of heavy artillery, which compelled the frigate, Hopkins had encountered, to retreat further up the bay, but the next day she escaped to sea. Shortly after, the Scarborough of twenty, and Cimetar of eighteen guns, with two prizes, anchored in Newport harbor a little to the south of Rose Island. Two row-galleys from Providence recaptured these prizes, and, with the assistance of a battery, thrown up on North Point* (present site of Fort Greene), compelled the enemy's vessels to seek refuge under Conanicut Island. From this position they were driven by a battery erected at the Dumplings, and were obliged to put to sea, April 14, 1776, under a vigorous cannonade from Brenton's Point and Castle Hill, where a small earthwork had been hastily thrown up, the remains of which are still to be seen. Narraganset Bay was now free from all British cruisers, and on *May 4, 1776*, Rhode Island, by a solemn act of the General Assembly, declared her Independence of the mother country, two months preceding that by the Thirteen United Colonies.

Howland and Bristol ferries already had been fortified, and, to prevent further incursions through the main entrance to the Bay, old Fort George, now called Fort Liberty, was immediately reconstructed; a stronger earthwork was erected upon Brenton's Point; and the battery on North Point was enlarged and armed with thirteen of the guns captured at Nassau by Commodore Hopkins (see Plate I, Fig. 1). These defended Newport harbor and the middle entrance to the Bay; but the west passage was without fortifications.

The British Army, March 17, 1776, had been driven by Washington from Boston; or, as the Earl of Suffolk absurdly spoke of this inglorious retreat in the House of Lords: "General Howe thought proper *to shift his position* in order, in the first place *to protect Halifax*, and after that object was secured, *to penetrate by that way into the interior country.*"

* From this Point a royal salute was fired, March 28, 1766, upon the repeal of the British Stamp Act.

It now became necessary for the fleet of England to possess some more secure and capacious roadstead. No place offered such great advantages as Narraganset Bay, where her ships could ride at anchor within its land-locked waters; and no safer base was to be found for the lodgment of her army than the sea-girt isle of Rhode Island. Once in possession of this natural fortress, Britain, with her army and navy, could menate every Atlantic port, and almost bid defiance to the United Colonies.

Accordingly, December 7, 1776, while Washington was in the Jerseys with most of the American army, Sir Peter Parker, with a British fleet of eleven vessels of war (seven line-of-battle ships and four frigates), convoying seventy transports having on board six thousand troops, passed unobstructed through the west passage into Narraganset Bay and rounded the north end of Conanicut. On the following day the British and Hessian troops, under command of Sir Henry Clinton, disembarked on Rhode Island and marched into Newport. Consternation spread on every side; the islanders fled, with their effects, to the main land; every defensible point on Narraganset Bay was occupied by American troops; and the entire State of Rhode Island became a vast camp confronting the enemy.

Brigadier-General Mulmedy, a French officer, reported at Providence, December 13, 1776, as Chief Engineer and Director of the American Forces, and was vested by the Assembly with plenary powers "to erect such works and at such places as he shall think proper."

According to Blaskowitz's Chart of Narraganset Bay, made in 1777, the following American Forts and Batteries existed, viz.:

	Guns.	Caliber.
Providence Fort - - - - -	50	18 and 24 p'ds.
Popasquash Battery - - - - -	6	18 pounds.
Bristol Fort - - - - -	8	18 pounds.
Batteries at either end of Bristol Ferry - - - - -	3	18 pounds.
Howland Ferry Defenses - - - - -	7	18 and 24 p'ds.
Fort Liberty, Goat Island, in Newport Harbor - - - -	25	18 and 24 p'ds.
North Point Battery (site of present Fort Greene) - -	20	18 and 24 p'ds.
Dumplings Rock Battery - - - - -	8	18 pounds.

The armament of the American Batteries at Fox, Sassafras, Field, Kettle, Bullock and Warwick Points are not included in the above.

Upon the British occupation the works on Conanicut, Goat, and Rhode islands fell into their possession.

At the same time that the Americans were erecting defensive works, the British engineers were not idle. They soon began to throw up redoubts on the east side of Rhode Island near Fogland Ferry; on the left bank of Lawton's Valley; and on Butt's Hill near the north end of the island. In 1777 (see Plate II.), they intrenched Newport with a strong continuous line, which ran northerly along the crest of the height rising above the right bank of the inlet to Easton's Pond, then turned westerly towards Wonumetonomy (corrupted to Tomony) Hill, and continued north of this height to Coddington's Cove. Five advanced works protected the northern branch; some batteries, of later construction covered the western branch; Wonumetonomy Hill was occupied by a strong redoubt; and a heavy battery was erected at Coddington's Cove.* To further strengthen this line, a thick abattis was placed outside of the fortifications, and the inlet to Easton's Pond was deepened by damming it at intervals. At Barker's Hill, near the Sakonnet or Eastern Passage, was a large redoubt, and near it a smaller one to guard the approach to the right of the British intrenchments, while minor earthworks occupied advantageous positions about the lines.

An attack from Tiverton upon the British works, by General Spencer with nine thousand American troops, was projected in October, 1777, but various untoward circumstances prevented its accomplishment.

Important events were transpiring elsewhere at this time. The battle of Germantown had been fought October 4, and on the 17th, Burgoyne's army had surrendered at Saratoga. The spirit shown in the former notwithstanding the loss of Philadelphia, and the success of the latter, convinced the French court that the Americans were strong and in earnest. Hence the Treaty of Alliance, between France and the United States, was signed February 6, 1778; but it was not till July 29, following, that Count d'Estaing, with a fleet of twelve ships of the line

*The ruins of redoubts and batteries are still visible on Bliss' Hill, Van Rennselaer's Place, Governor Collins' former residence, Bailey's farm, and Coddington's Cove, besides a more advanced work near the shore north of Coddington's Cove, which probably was thrown up in 1778.

and four frigates, appeared off Rhode Island and blockaded the entrances to Narraganset Bay. The next morning two of his ships ran up the West Passage under the fire of a British semi-circular battery, near Bonnet Point on the Main (see Plate I., Fig. 4), and a rectangular flanked redoubt on the southern part of Conanicut Island, near Beaver-Head (see Plate I., Fig. 5).^{*} The daring of these French ships, supported by a large fleet in the offing, caused the British to abandon the Bonnet and the batteries on both shores of Conanicut Island; and burn, blow up, or sink the whole of their armed vessels (mounting 212 guns) in Narraganset waters. All was now alarm in the British camp; yet, from some unaccountable delay and want of concert between the French fleet and the American army, ten precious days elapsed without striking an effective blow upon the demoralized enemy.

It was not till August 8 that d'Estaing entered Newport harbor in force, when the British withdrew their outposts from the head of the island and concentrated their entire army within their Newport lines; and, not till the next day, were the four thousand French troops landed on Conanicut, and the advance, by Sullivan with his motley assemblage of ten thousand men, made from Tiverton and Fort Barton (on its heights) to occupy the abandoned British posts. The opportune moment for a telling attack upon the enemy unfortunately had now passed, for Lord Howe, with a British fleet of thirty-six sail, hove in sight, whereupon the French troops re-embarked, and the next morning d'Estaing put to sea to engage the English admiral. As we are not writing the history of the war, we must omit an account of the naval actions which followed; the injury done by the tempest to both fleets; and the causes of d'Estaing's failure to further co-operate with his American ally.

The French fleet sustained considerable damage, in entering and leaving Newport harbor, from the heavy cannonade kept up by the British batteries at and near Castle Hill, on Brenton's Point, Goat Island, and North Point. All of the Conanicut batteries had been abandoned, their guns spiked, and their magazines destroyed, in anticipation of the occupation of that island by the French.

^{*}The remains of both the Bonnet and Conanicut batteries are still visible.

The American light troops, August 10, 1778, advanced to within a mile and a half of the British intrenchments; but, in consequence of the great storm, it was not till the 15th that the main body of Sullivan's army pushed forward and encamped within two miles of the enemy's works. That night a battery, for seventeen pieces of heavy artillery, (see Plate II.), was commenced on Honeyman's Hill to support our right flank and to command the British defenses on Bliss' Hill. For five days, from the 16th to the 20th, our siege-works were pushed forward with vigor and extended to the left, where batteries were established to threaten the enemy's right. An incessant cannonade was kept up from four batteries to which, on the 23d, we added a fifth. Such was the effect upon the enemy that the British, on the 19th, began an inner line of intrenchments, on a convex curve extending from a strong redoubt near the northern end of the "Cliffs" (Fearing's Place)^{*} to the North Battery on the Bay. Besides the two strong works at the extremities of this line, there were three intermediate batteries and two detached redoubts—one within and one without this line—the former to sweep any approach by Easton's Beach and the latter to command the opening between the two lines of intrenchments.

Count d'Estaing returned to Newport on the 20th, which greatly encouraged the besiegers; but, on the next day, he sailed for Boston to repair damages to his fleet.

Apprehending the approach of the British fleet with reinforcements to the garrison of Newport, Sullivan abandoned his design of storming the English intrenchments, though all but one of the enemy's out-works, facing eastward, had been vacated. On the evening of the 28th, Sullivan raised the siege and retreated to Butts' Hill, forming his line of battle, supported by batteries and intrenchments, across the head of the island (see Plate II.). The so-called "Battle of Rhode Island," which took place on the next day, will be passed over, as it forms no part of our sketch, except to say that the works on Butts and Turkey Hills played a conspicuous part in that contest.

During the century which has elapsed since these stirring events, much criticism has been proffered respecting the military operations

^{*}Slight remains of this redoubt are still visible.

of August 28-30, but comparatively little on what transpired earlier in the month.

We have already spoken of the fatal inaction during the ten days after the arrival of the French fleet, which, with the loss of time by the great storm, deferred the initiation of siege operations till the night of the 15th.

As a military engineer, after a very careful examination of the ground occupied by the British intrenchments and the American siege-works, I am constrained to say that Sullivan's points of attack were not well chosen. Between him and the enemy was a deep ravine, at the bottom of which was Easton's Pond and its deepened inlet. Any regular approaches by saps, down the slope of Honeyman's Hill, would have been exposed to a deadly plunging fire from the British out-works and intrenchments; and, had it been possible to reach the bottom of the ravine, there was still a stream or pond to pass and the opposite slope to ascend under a destructive raking fire of infantry and artillery, which would have tried, if not have baffled, the valor of the best disciplined troops. It is true that the American batteries had lessened the enemy's power of destruction, yet there was still a large reserved strength in the British lines sufficient to defeat any attempt to storm them. The accumulation of batteries on the left of our position would indicate that it was designed to turn the right of the British front line by a strong column moving over the narrow pass between Easton's Pond and the sea. This assault probably would have fared no better; and, with such troops as would have constituted the American attacking force, it would have been utterly impracticable after the construction of the second British line; which, besides its own fire, had its inner redoubt to sweep with artillery the narrow defile over which the column must move, and its outer redoubt to command the entire opening between the lines.

Had Sullivan marched down on the west side of the inlet of Easton's Pond, and made his attack from the north, instead of from the east, upon the salient made by the north and west branches of the British outer line, he probably would have been successful. At the north the ground for attack was very favourable, there being little or no ravine. Batteries planted there would have enfiladed the whole northern branch of the British line, and taken partially in reverse all the out-works

along its front. The redoubt on Wonometonomy Hill might still have held out; but so it would in any attack from the east.*

The British remained undisturbed on Rhode Island till October 11, 1779, when a fleet of fifty-two transports arrived from New York to carry away their troops and military-stores, besides forty-six families of Tories. After destroying the lighthouse at Beaver-Tail and leveling the battery at North Point, the vessels, as fast as they were loaded with stores and ordnance, were moored off Brenton's Point to receive the troops, who burned the barracks they had left. Before sunset of October 25, 1779, Rhode Island was relieved of its detested foe, which had left nothing behind but the utter desolation it had wrought during its occupation of nearly three years. The suffering of the inhabitants was extreme, particularly during the following winter, which was so cold that for six weeks Narraganset Bay was frozen over, and the ice extended seaward to Block Island and as far as the eye could reach.

The next year the murky cloud, which had so long hung over Narraganset Bay, was lifted, and the bright sunlight succeeded on the arrival, July 10, 1780, of Admiral de Ternay, with a fleet of forty-four armed vessels and transports bringing into Newport over five thousand French troops, commanded by Count de Rochambeau. The following day the army landed, and was put in possession of all the defenses of the harbor; and on the succeeding night the city was ablaze with a brilliant illumination in honor of its guests, among whom were some of the most distinguished noblemen of France. Soon British tyranny was forgotten, and "the wounds inflicted by Hessian ruffianism were healed by the balm of French politeness."

Washington, who came to Newport, March 6, 1781, to confer with Rochambeau about an active campaign, had a most notable reception by the citizens of Newport and the officers and troops of the French army. The splendid ball then given, and its gay assemblage of fair women and brave men, was a brilliant episode in the Revolutionary annals of Rhode Island.

* After exhausting all sources of information in Rhode Island, I fortunately found, in the library of the Massachusetts Historical Society, a manuscript map of Narraganset Bay, clearly showing the British Lines of Defense covering Newport, and also the works of the American Siege Operations. I deemed it so valuable that I, at once, ordered a copy of it to be made at my own expense; but, subsequently, the Society decided to produce a photographed fac-simile, of which Plate II. embraces all the essential parts relating to the military operations in 1777-'78.

From various memoirs, particularly that of the Count de Deux-Ponts, we learn most of the details of the operations of Rochambeau's army in Rhode Island. Soon after its arrival, the British fleet of twenty ships threatened to force a passage through the main channel into Narraganset Bay. To guard this entrance, Rochambeau threw up batteries, armed with twelve pounders, on Brenton's Point, while the French navy occupied others on Conanicut Island; but these latter were abandoned, July 27, 1780, as they were accessible on all sides to British assaults. When the reports of Sir Henry Clinton's intention to attack the allied forces were confirmed by information received from General Washington, the French commander, with the aid of the Rhode Island militia, repaired and remodeled all the works thrown up by the British when they held Rhode Island; and added others, particularly redoubts on Coaster's Island, and a strong work on Rose Island* armed with forty pieces of heavy artillery. With such a powerful battery to defend the right of the line of seven heavily armed French ships, and the guns and mortars of Brenton's Point to protect its left, the whole presented a formidable array of land artillery and naval broadsides to guard the main entrance to the bay. Till the departure of Rochambeau, June 10, 1781, he, 'with the assistance of many officers of engineers, continued to strengthen all the batteries, particularly those on Goat Island which had not been destroyed upon the British evacuation. Among the new works thrown up by the French was a battery on Hallidon Hill (see Plate I., Fig. 3) as this height commanded, at short artillery range, all the batteries at Brenton's Point and on Goat Island. It was then called Fort Chastellux, after the Chevalier de Chastellux, one of Rochambeau's *Mareschaux des Camps*. After the Revolution it was known as Fort Harrison, being on the Harrison farm, and since, it has acquired the name of Fort Denham from some local association. What remains of it is situated in front of the "Thorp" cottage. Other batteries on the southern shore of Rhode Island were built during the Revolution, of which the remains of one are still visible on the "Ocean Drive," near the southwest extremity of the island, at Winans' cottage.

* This small island, called Conskuit by the Indians, was purchased, in 1675, by Peleg Sanford from the Sachem Mausup.

Brigadier-General de Choisy, with a small body to garrison the defenses (600 French recruits and 1,000 local militia), was left at Newport when the French army marched from Rhode Island to Yorktown, Va., the field of glory of the allied forces.

The departure soon after, August 25, 1781, of the French fleet with the heavy artillery and remaining troops to the Chesapeake, obliged the Assembly of Rhode Island further to provide for the defense of the state by mounting additional batteries at North and Brenton's Points, and by strengthening those at Pawtuxet, and Field and Kettle Points to guard against any approach by Providence River. These were timely precautions, for Sir Henry Clinton had formed a plan to seize the French stores and magazines at Providence and probably to capture Admiral de Barras fleet at Newport. Fortunately the expedition was accidentally delayed till the 28th, when the bird had flown, much to the chagrin of General Clinton and Admiral Graves, who had anticipated a certain conquest.

The capture at Yorktown, October 19, 1781, of the British army under Cornwallis, virtually terminated the war of the Revolution, and successful negotiations for peace soon followed. Consequently the garrison at Butts' Hill was disbanded in July, 1782.

The war had left the United States with a heavy debt, therefore all expenses were curtailed, particularly those for the military, no longer required. The whole force retained, at the conclusion of peace, amounted to less than seven hundred men, under command of General Knox; and even this miniature army, before the end of the session of Congress, was reduced to twenty-five men to guard the stores at Pittsburg, Pa., and fifty-five for West Point, N. Y., and the other magazines—in all eighty men.

Without garrisons, our military posts went rapidly to decay, including, of course, those at Newport which had been dismantled. However, by the Act of the Assembly of Rhode Island of October 4, 1784, the fort on Goat Island was armed, the barracks repaired, and the work made to assume "some degree of respectability." It had borne the name of various British sovereigns during its colonial existence of three-quarters of a century; of "Liberty," pending the war of Independence; and, now, it was to assume the name of the illustrious Washington.

From this work was probably fired the first salute announcing that Rhode Island, May 29, 1790, had finally joined the Union of the Thirteen United States, by her adoption of the Federal Constitution. Fort Washington,* in 1792, according to the inspection returns, had an armament of three twenty-four, five eighteen, and two six pounders, when the Assembly ordered the "purchase of a reasonable quantity of powder to be made use of at the said fort upon special occasions."

The first European Coalition was made against the French Republic in 1793. Soon, both England and France so grossly violated our neutrality upon the ocean that Congress, in 1794, ordered the building of six frigates; added a corps of artilleryists and engineers to our small army; and made appropriations for fortifying our principal ports on the Atlantic coast. The appropriation for Newport harbor was applied to the works on Goat Island (see Plate VI.), Bechat Rochefontaine, March 29, 1794, being appointed temporary engineer. He was soon succeeded by Stephen Rochefontaine, who, February 26, 1795, was made the Commandant of the newly organized corps of artilleryists and engineers. The name of the latter, as the constructing engineer of the works on Goat Island, is still to be found, neatly cut, upon a stone (turned upside down) in the foundation of one of the new buildings at the Navy Torpedo Station. It is stated, in a report communicated, January 18, 1796, by the Secretary of War, to the United States Senate, that: "For the defense of Newport harbor there have been erected, on Goat Island, a fort, a citadel and an air-furnace. The excellency and importance of this harbor, in time of war, recommend a further expenditure to render the defense complete. To finish the fort, erect an artillery store, and make a covered-way round it, as in a regular fortification, the expense is estimated at about six thousand dollars. There have also been erected a citadel on Tomony Hill, back of the town of Newport, for the protection of its inhabitants, and a battery and guard-house at Howland's Ferry at the northern end of the island, to keep open a communication with the Main, in case of an invasion. But, to secure effectually this communication, a citadel should be erected on Butts' Hill, that position commanding Howland's Ferry and Bristol Ferry. The cost of it is estimated at 1,800 dollars."

*The name of "Washington" was given, October 4, 1784, by the Act of the Assembly of Rhode Island.

France had continued her piratical aggressions upon our commerce, and our minister, sent to Paris, had been treated with contempt and indignity; yet, such was the strength of the Gallican feeling among our people, that, not till 1798, were vigorous measures adopted to protect the nation from further insult. The outrageous conduct of the French Directory towards our government; the efforts of their agents to sow sedition throughout our country; their acts to invigorate opposition to the constituted authorities; their disregard of the law of nations and of solemn treaties; their rebuffs of our repeated efforts to adjust differences; their attempts to bribe our envoys, failing which they were expelled from French soil; and their continued seizure of our merchantmen till our losses amounted to \$15,000,000, could not fail to rouse the United States to resistance. Forbearance had reached its utmost limit, and at once preparations were instituted to maintain the dignity and honor of the nation. Important additions were made to our navy, and a separate department for its control created; a marine-corps established; many new regiments of infantry, troops of cavalry, and more artilleryists and engineers added to our regular forces; a provisional army, with Washington at its head, authorized; liberal appropriations for fortifications granted; our treaties with France abrogated; our commerce with her suspended; and a quasi war instituted by legalizing the capture of her armed vessels, which resulted in several engagements with her cruisers.

With such a threatening aspect of affairs, and an ample justification for a declaration of war, the construction of the sea-coast fortifications was pressed forward with vigor. The importance of Narraganset Bay demanded that full provision should be made for the defense of its main entrance. Accordingly immediate measures were taken to repair and strengthen some of the old works, to rebuild others, and to add an entirely new one. All were placed under the supervision of Major Louis Tousard, who had succeeded Lieutenant-Colonel Rochefontaine, when the latter, May 7, 1798, was dismissed from service. Tousard was born in France in 1749; lost an arm in the action of Butts' Hill, August 29, 1778, during the war of the Revolution; was commissioned a Major of Artilleryists and Engineers, February 26, 1795; and was disbanded, January 1, 1802, upon the organization of the present Corps of

Engineers created by the law of March 16, 1802. He subsequently was a United States revenue officer, and died in New Orleans, La.

The works repaired, enlarged, rebuilt, and constructed in 1798-1800, for the defense of the main entrance to Narraganset Bay and Newport harbor, were:

On Brenton's Point, east side of entrance (see Plate III.), "an enclosed indented work of masonry" for twelve guns, with a brick magazine, and soldiers' barracks and officers' quarters for one company.

On the Dumplings rock, Conanicut Island, west side of entrance (see Plate IV.), an elliptical stone tower to mount eight heavy guns on the sea-side, half in casemates and half in barbette.

On Goat Island, in the centre of Newport harbor (see Plate VI.), a small enclosed irregular work of masonry and earth mounting twelve guns, besides flank batteries mounting eighteen guns, with a brick magazine, and soldiers' barracks and officers' quarters for one company.

On Brenton's Cove, south of Goat Island (see Plate I., Fig. 3), a small battery occupying the site of an old French battery (Fort Chastellux) on Hallidon Hill.

On North Point, an elliptical stone-scarped battery (see Plate I., Fig. 2), for twelve or thirteen guns.

On Rose Island, a regular masonry work (see Plate V.), with four bastions (two circular and two polygonal) designed for sixty guns, with bomb-proof barracks within for three hundred men.

Of these works, the Dumplings Tower and Rose Island Fort were never finished, armed, or garrisoned. The former is sometimes called Fort Louis; but there is no official authority for the name. Possibly Major Tousard may have so called it after his own Christian name, or after Louis XVI., who had been our ally in the Revolution. It has also been called Fort Brown, having taken the designation of the old battery near it, so named after its first commander—"General" Brown—who fired upon the British vessels of war—the Scarborough and Cimeter—April 14, 1776, to drive them from Newport harbor. During this century the Dumplings Tower has been crumbling into a picturesque ruin (see Frontispiece); and some years since served as a target for the sensational Captain John Magruder, when commanding Fort Adams, against which to practice his artillerists in distant firing. The work on

Rose Island was called Fort Hamilton, after the patriot statesman Alexander Hamilton. It has never been used except for a quarantine station for the port of Newport.

The elliptical battery on North Point, when completed, was named Fort Greene, after Rhode Island's most distinguished general in the Revolution; the work on Goat Island, which had borne so many aliases, finally, in 1798, was re-christened Fort Wolcott to commemorate the revolutionary services of Governor Oliver Wolcott, who had just died, December 1, 1797,* its former name of Fort Washington having been appropriately transferred to the work on the Potomac River opposite to Mount Vernon; and the new work on Brenton's Point, when nearly completed in 1799, was named Fort Adams.

An account of the imposing ceremonies of christening this latter fort we will condense from the relation given in the Newport Mercury of July 9, 1799.

The twenty-third anniversary of American Independence (July 4, 1799) was ushered in by a Federal Salute of thirteen guns from Fort Wolcott; and, before noon, the company of Captain John Henry of the Artillerists and Engineers, United States Army, which was to garrison the new work, marched at the head of the column composed of the Major-General of the State of Rhode Island and the Militia Staff, the Newport Ancient Artillery, the Newport Guards, and a large concourse of patriotic citizens.

The gateway leading to the battery not having been finished, Major Tousard had constructed a temporary arch, decked with wreaths of evergreens and flowers, and over its key-stone was a tablet inscribed:

FORT . ADAMS.

THE ROCK ON WHICH THE STORM WILL BEAT.

At a quarter before twelve o'clock, Major Tousard addressed the assemblage in the following concise and energetic words:

"Citizens! Happy to improve every occasion to testify my veneration for the highly distinguished Citizen, who presides over the Government of the United States, I have solicited the Secretary of War to

* It was also in compliment to his son, then the able Secretary of the Treasury.

name this Fortress—Fort Adams. He has gratified my desire, and I hope the brave officers and soldiers, who are and shall be honored with its defense, will, by their valor and good conduct, render it worthy of its name, which I hereby proclaim—

FORT ADAMS."

When the address was ended, the American Flag was run up and saluted with thirteen guns from the battery and three hearty cheers from the whole assemblage. The guns from Fort Wolcott returned the salute, as did also the Newport Artillery, the Newport Guards following with the same number of platoon discharges.

After the collation (provided by Major Tousard) had been fully enjoyed, Major Henry's company "paraded in line with the guns of the battery, with the officers in front headed by Majors Tousard and Jackson." The several independent companies, general and staff officers, and citizens passed them in review, the officers and colors saluting. When the column returned under the entrance arch, three guns were fired from the battery, which terminated the memorable ceremony.

Notwithstanding the outrageous treatment of our former embassies to France, much to the surprise of the whole country, President Adams, early in 1799, appointed new envoys to the French Directory; but, before their arrival in Paris, Napoleon was at the head of the new government. With the change of rulers came a change of policy. A qualified treaty was agreed upon, and pending its final ratification, Mr. Jefferson, the head of the Gallican party in the United States, was inaugurated President, March 4, 1801, which terminated our hostilities with France.

The Treaty of Amiens, concluded a year later, gave peace to all Europe; but this hollow truce was of short duration. Again our lucrative commerce became a prey to the mandates of Napoleon's Berlin and Milan decrees and England's orders in council. To the aggressions of Great Britain were added those of searching our ships upon the high seas and the impressment of our seamen. The United States temporized till forbearance ceased to be a virtue. War was inevitable; yet, only two years before the sword was drawn, our Secretary of War said to Congress that: "No further appropriation on account of fortifica-

tions was proposed in the estimate for the year. But, in case of war, additional works will be required. Their situation, nature, and extent, depending upon the emergencies which may require them, cannot be ascertained." The Secretary—William Eustis—being a New England man, deigned to add: "The island of Rhode Island, from the peculiarity of its local situation, bordering on the ocean, accessible at all seasons of the year, affording a safe and commodious harbor, fertile in itself, commanding other islands, well stocked with provisions, and a central station from which to harass the trade of the continent, offers to an enemy advantages not combined in any port, and requires additional means of defense." Whereupon this great and liberal statesman recommended: "To meet the expenditures required *at this and other places*," that "*one hundred and fifty thousand dollars be appropriated on account of fortifications.*"

What a magnificent provision to prevent British fleets from seizing this "*central station*," and *all of our other Atlantic ports!*

According to the report of this Secretary of War, made to Congress December 11, 1811, only six months before war was declared against Great Britain, there were but *seventeen* guns in Fort Adams, and *thirty-eight* in Fort Wolcott, in all *fifty-five* pieces of ordnance, large and small, to defend Narraganset Bay against the most powerful fleets of the world! Doctor Eustis probably proposed to defend our harbors on the Jeffersonian plan, by gunboats ready to be launched upon the appearance of the enemy, or by heavy cannon on traveling-carriages fired by the local militia from the shores of the ports assailed.

President Madison, June 1, 1812, sent a confidential message to Congress, in which he recapitulated all the causes of our complaint against Great Britain; her impressment of our seamen; her infringement upon our maritime jurisdiction, and disturbance of the peace of our coasts; her paper blockades, unsupported by any adequate force; her violation of our neutral rights by her orders in council, and her inflexible determination to maintain these orders against all appeals to her justice; her suspected instigation of Indian hostilities against our people; and her conduct, which, taken altogether, amounted to actual war against the United States, while we remained at peace with her.

War was declared against Great Britain June 18, 1812; but, *not till a*

month after, was there appropriated by Congress half a million of dollars for coast defense. In consequence of thus rushing headlong and wholly unprepared into a war with the most powerful nation on earth, our seaboard was kept in a continuous state of alarm; our coast trade was almost annihilated; destructive incursions were made into our bays and inlets, even to our capital; and large bodies of militia were constantly being called out, at vast expense and inconvenience, to protect our inadequately fortified harbors. Though no hostile fleets entered Narraganset Bay during the war, the feeble garrisons of the works defending the main channel were kept in constant apprehension; several times the state forces were summoned to resist attack; and many vessels were chased or captured by the British squadron within sight of Rhode Island. Most of these troubles would have been spared to the State by a few strong forts and batteries, the total cost of which would have been far less than the actual expenses incurred in trying to meet them. Congress, in 1816, had to appropriate nearly fourteen millions of dollars to pay the militia required in the latter months of the war.

This war, of 1812-'15, had so clearly demonstrated the almost defenseless condition of our sea-coast, that, the year after its termination, liberal appropriations were made for fortifications; and a Board of Engineers was organized to study the whole problem of national defense, and to devise the necessary fortifications to protect the entire coasts of the Atlantic and Gulf of Mexico. This Board was composed of General Joseph G. Swift, the Chief Engineer of the Army; General Simon Bernard, a distinguished French engineer who had done good service under Napoleon; and Lieutenant-Colonels William McRee and Joseph G. Totten, of the Corps of Engineers.

President Monroe, taught by "the faithful admonitions of experience," in his first inaugural message, March 4, 1817, took occasion to call attention to the absolute necessity of fortifying our coasts and frontiers, even though it might be at a very heavy expense, as the only certain security against the cost, anxiety, distress, and destruction of property which a superior naval force, with a few thousand troops on board, might at any time impose upon us. He urged, also, the formation of an army competent not only to garrison and preserve these fortifications, but to meet the first invasion of a foreign foe.

The Board of Engineers, April 7, 1820, submitted its project for the defense of Narraganset Bay, to which there are three entrances. The Eastern, or Sakonnet Passage, was already closed by the Stone Bridge, opposite Tiverton; the Western Passage was to be shoaled with a sunken dyke, below Dutch Island, in such manner as to allow coasters freely to pass over it, but to exclude all vessels of war; and the Middle, or Main Passage, was to be barred, effectually, by permanent fortifications on Brenton's Point, the Dumplings Rock, and Rose Island, while Forts Greene and Wolcott were to defend the inner waters about Newport.

From the report of this Board we learn the condition and value, in 1820, of the then existing fortifications, which had been built in 1795-1800, to be as follows:

FORT ADAMS (see Plate III.), which crosses its fire with Fort Wolcott, and defends on that point the entry to Newport harbor, gives also some fire on the Middle Passage into Narraganset Bay. The tracé of this fort is so irregular, and its angles are so multiplied for no purpose of defense or convenience, that it seems rather the result of chance and caprice than even of the infancy of the engineering art. It consists of two parts, one appearing to have been added to the other at a later period. The southern part has a development of about seven hundred and fifty feet, measured on its interior crest, and a command of fifteen feet over the country, and forty-five over low water. Its parapet is from twelve to fifteen feet thick, its rampart from twenty-three to twenty-five wide, and its scarp wall less than ten feet high. This part contains a bomb-proof barrack. The northern part has a development, measured in the same way, of about four hundred feet, and has a command of forty-two feet over low water. Its parapet is from twelve to eighteen feet thick, the terre-plein of its rampart is on a level with the parade, on which is a wooden store-house and a hot-shot furnace; has no masonry scarp, and is covered with an earthwork six feet high. From these two parts, constituting Fort Adams, about twenty guns could be directed upon the entrance of the bay and as many more upon Newport harbor. The Board of Engineers considered it useless, as it "could neither resist four days against an attack by land, nor contain the formidable armament" demanded by the position.

DUMPLINGS TOWER (see Plate IV.), on Conanicut Island, is an elliptical stone structure, its transverse axis being one hundred and eight feet long, and its conjugate axis eighty-one feet to the exterior of the scarp-wall, which varies in height from twelve to twenty-six feet, owing to the inequalities of the site. Under the terre-plein of the front of the Tower are four casemates, fifteen to eighteen feet long, fifteen feet wide, and seven to eight feet high to the crown of the arch; and above were emplacements for four heavy barbette guns behind a stone parapet of five feet in thickness. Its command, when finished, would be fifty-four feet above low water. "When," says the Board of Engineers, "we take into consideration that Dumplings Point is an essential position for defending the central pass into Narraganset Bay, and that the channel is one mile broad at this place, we must perceive that the effect of this Tower is almost null for that purpose, and that its co-operation with Fort Adams, to accomplish so important an object, has never been calculated and is totally inefficient."

FORT HAMILTON (see Plate V.). This unfinished work, on Rose Island, is of a rectangular form, six hundred by five hundred and twenty feet, with flanking towers, fifty feet in diameter, on the northwest and southwest angles, and regular bastions at the two other angles. The south front, which sees vessels coming up the channel after passing Brenton's Point and the Dumplings, the east front (except its curtain), and the northwest flanking tower are nearly finished; the remainder of the work being merely sketched. The scarp-walls are low, the parapets where finished about sixteen feet thick, and the rampart twenty-five feet wide. The command of the fort is but eight feet above the ground, and seventeen above low water. Its location, on the site of the old French battery of 1780, is good; as it crosses its fires with those of all the other works. "It is to be regretted," says the Board of Engineers, "that the sketch of this fort offers none of the requisites for occupying this position in a manner suitable to the principal object which it should have in view. The towers are of no use, and seem only placed there to spoil the general tracé and disposition of the works." The bomb-proof barracks at this work are now untenable.

FORT GREENE (see Plate I., Fig. 2), is an elliptical barbette battery for twelve or thirteen guns, with a palisaded gorge. The work has a de-

velopment, measured upon its interior crest, of two hundred and forty feet; its parapet is twenty-one feet thick; its rampart twenty-six feet broad; its scarp-wall twenty feet high; has a command of twenty-nine feet above low water; and within the work is a brick barrack and guard-house, a bomb-proof magazine, and a hot-shot furnace. The Board of Engineers say, "this battery is sufficient for its purpose."

FORT WOLCOTT (see Plate VI.), is a large but low battery, having an enclosed redoubt in the middle whose head flanks the front of the battery. The development of the redoubt, measured upon its interior crest, is seven hundred and forty feet, of which three hundred and twelve look towards the sea; its parapet on the gorge is twelve feet thick, and in other parts eighteen; its rampart is twenty-one feet wide; and its command is thirteen feet above the ground and thirty-six above low water. The two wings of the battery measure eight hundred and forty feet of interior crest development, of which three hundred and twenty-five feet are on the right and five hundred and sixteen to the left of the redoubt; their parapets are twenty-five feet thick; and their command is twenty-seven feet above low water. Within the redoubt is a powder magazine; behind the left wing is a brick barrack; and within either wing are hot-shot furnaces. The whole work could mount fifty guns; and its fires, which cross those of Fort Adams and Fort Hamilton, would suffice to cover the harbor of Newport.

From the foregoing description of the works existing in 1820, it will be seen that the Board of Engineers considered those at Brenton's Point, the Dumplings, and on Rose Island as almost worthless; while those at North Point, and on Goat Island, would suffice for interior defense when covered by new channel fortifications.

For the Dumplings, where the United States owns nearly seven acres of land, the Board of Engineers submitted a project, designed by General Bernard, for a very large and costly work. Across the Point, extending from shore to shore, was to be a strong line of three bastioned fronts, with two advanced redoubts occupying higher elevations; and within this enclosing line were to be ten heavy batteries, along the rocky shore, to fire seaward upon ships endeavoring to force a passage through the channel. The entire armament of the work was to be three hundred and eighty-six pieces of artillery of all calibers. This work,

never commenced, would be entirely unsuited to the present requirements of this excellent position, where eventually a strong fortification must be built.

For Rose Island, where the government owns twenty-three acres of land, the Board of Engineers proposed a small fort, on the site of the present unfinished work, three hundred and eighty-four yards in perimeter, to mount nearly one hundred guns, in barbette, chiefly on the three sea fronts.

For Brenton's Point, then the most important position of all those to be fortified in Narraganset Bay, the Board of Engineers deemed it necessary to construct, immediately, a powerful work; not only to defend the main entrance against an enemy's fleet, but to hold the position against a large land force till it could be relieved by our own troops, which would require time to be organized and marched to the attack of the enemy. It properly was observed that the strength of the work should be fully equal to the objects to be secured, that is to provide against such a contingency as had actually occurred. Large fleets during the Revolution had invaded Narraganset Bay, and for three years Rhode Island had been held by a strong hostile army which we had not been able to dislodge. It is true that our population and resources had increased, but even in 1820 we were but a feeble power as compared with some of the nations of the old world which might assail us. History was full of illustrations of large fleets and armies being quickly transported to distant points; therefore, there must be no stint in our preparations to meet such foreign expeditions as might be sent to secure a lodgment in Narraganset waters—a bay so capacious, so approachable, occupying so important a strategic position on our northern coast, and acknowledged to be the best roadstead upon our Atlantic seaboard.

“With the opening of this anchorage properly defended, hardly a vessel of war could come, either singly or in small squadrons, upon the coast, in the boisterous season, without aiming at this port, on account of the comparative certainty of an immediate entrance. And this would be particularly the case with vessels injured by heavy weather, or in conflict with an enemy; with vessels bringing prizes, or pursued by a superior force. The use of this port would almost necessarily bring

with it the demand for the means of repairing and refitting; and the concentration of these upon some suitable spot would be the beginning of a permanent dock-yard. For the same reason that ships of war would collect here, it would be a favorite point of rendezvous for privateers and their prizes, and a common place of refuge for merchantmen.

“But the same properties that make Narraganset Roads so precious to us would recommend them to the enemy also; and their natural advantages will be enhanced in his eyes by the value of all the objects these advantages may have accumulated therein.

“If this roadstead were without defense an enemy could occupy it without opposition, and, by aid of naval superiority, form a lodgment on the island of Rhode Island for the war. Occupying this island with his troops, and with his fleets the channels on either side, he might defy all the forces of the Eastern States; and while, from this position, his troops would keep in alarm and motion the population of the East, feigned expeditions against New York, or against more southern cities, would equally alarm the country in that direction; and thus, though he might do no more than menace, it is difficult to estimate the embarrassment and expense into which he would drive the government.”

Entertaining these views, the Board of Engineers say “the defense adopted for Narraganset Roads must be formidable in the important points, because they will be exposed to powerful expeditions” of the enemy which “may take possession, and bend his whole force to the reduction of the forts on the island, which cannot be relieved until a force has been organized, brought from a distance, conveyed by water to the points attacked, and landed in the face of his batteries; all of this obviously requiring several days during which the forts should be capable of holding out. To do this against an expedition of ten or twenty thousand men demands something more than the strength to resist a single assault. Unless the main works be competent to withstand a siege of a few days, they will not therefore fulfil their trust, and will be worse than useless.”

With these premises, in the then feeble condition of the country, very different from the present state of affairs, the present Fort Adams was planned and built. It consists of a pentagonal masonry main-work, bastioned on the three sea-fronts, and casemated throughout for gun-rooms

and habitations for the garrison. The principal channel-front has three tiers of fire, the others two, the upper batteries of the whole being in barbette. Covering the two land fronts is a crown-work separated from the main-work by a deep dry ditch. Exterior to all, except the main sea front, is a covered-way with the usual places of arms, traverses, &c. Upon a commanding hill in the vicinity is a formidable casemated masonry redoubt, connected with the fort by an earthen caponnière, so arranged as to form a strong barbette battery towards the ship channel. These various defenses cover about twenty acres, and were designed to mount nearly five hundred pieces of artillery of various calibers. For beginning the construction of this work, Congress, in 1824, appropriated \$50,000, of which \$22,500 were applied to enlarging the site* to one hundred and sixty five-acres, which were purchased by the United States at various times after 1794. Lieutenant Andrew Talcott, August 10, 1824, was assigned, temporarily, to the duty of making the preliminary arrangements for building the work; and, February 22, 1825, Lieutenant-Colonel Joseph G. Totten, Corps of Engineers, who had planned it, was charged with its construction. He continued personally to direct the work till his promotion, December 7, 1838, to be the Chief Engineer of the Army, at which time Fort Adams approached completion. Most of the young officers of engineers served their apprenticeship here, this work being a kind of school of application for the Corps of Engineers.

During the war of the Rebellion, the West Passage being entirely undefended, permanent batteries were commenced on Dutch Island,

* Brenton's Point, upon which this fort is situated, is the extreme north-westerly point of Brenton's Neck, which constitutes the lower part of the island of Rhode Island south of an east and west line through the Lime Rocks in Newport harbor. The original proprietor, William Brenton, left Hammersmith, England, and landed in Boston in 1634. He brought with him a commission from Charles the First, dated 1633, and termed a grant, which allowed him to take so many acres to a mile of all the lands he should survey in the New England Colonies, by which authority he became possessed of extensive tracts on the Merrimac River and elsewhere. In 1638, he removed with his wife to the present site of Newport, R. I., and was one of the nine gentlemen, who, February 28, 1639, united themselves into an active body politic for the purpose of forming a township in the Island of Aquidneck, which they termed a "Plantation." In doing this their first object was to choose a spot which would prove the most lucrative situation for a commercial town with a good harbor. Accordingly the place selected was Newport, of which, probably, William Brenton was the surveyor. He had already taken possession of the "Neck" and named it "Hammersmith," in which were two thousand acres of land, having the richest soil and presenting the most picturesque scenery. On Redoubt Hill, where are situated the present quarters of the commanding officer of Fort Adams, he made a clearing in the dense forest and built a brick dwelling, one hundred and fifty feet square, which commanded a magnificent view of the ocean and bay, and was surrounded with well laid out parks, beautiful gardens, extensive orchards, silver lakes, and roads and foot-paths meandering everywhere.

which it is designed to occupy with works mounting sixty heavy guns, arranged in amphitheatre on its southern slope and upon the summit of the island. An interior keep should be added for reserve magazines and other purposes.

Though large sums have been expended upon the fortifications of Narraganset Bay, its entrances are far from being adequately protected against the present heavily-armored steam fleets with their enormous guns. The art of war, like almost everything else, has had its evolution. War-chariots, the Greek phalanx, and the Roman legion, have yielded to the thin formations of modern armies in battle. The sling, the pike, the cross-bow, and the matchlock have given place to the improved magazine-rifle for our infantry. The catapult, the culverin, and the small smooth-bore cannon, have been superseded by heavy rifled artillery, sometimes of pieces weighing one hundred tons, and throwing projectiles of two thousand pounds with prodigious force to great distances. Fleets of row-galleys, of wooden sailing-ships, and of side-wheel steamers, have been surrendered, first for light-plated, and now for the heaviest armored propellers. And, in like manner, thin earthen parapets, masonry scarp-walls, and low barbette batteries are now to be displaced by heavy iron turrets and the strongest combinations of earth, masonry, and shields of hardened steel.

In this changed condition of things our sea-coast fortifications have lost much of their power of offense and defense; yet they are far from being useless, as is often supposed by civilians. On the contrary, they are most useful adjuncts to any new system of works which we may hereafter construct. With our increased population they are still adequate to resist for a sufficient time any land attack; armed with our present guns, converted into rifled artillery, they could protect our harbors against naval marauders, and our channel torpedoes from boat expeditions; and, with slight modifications and some large ordnance, would be able to cope with any, except heavily armed and armored ships. But we must be prepared for *all* future contingencies, hence we require better shielded and stronger armed fortifications.

Fortunately, with the greatly increased range of modern artillery, we have very advantageous positions, within good supporting distance, for new fortifications for the defense of the middle and western entrances

into Narraganset Bay. For the eastern entrance the bridges at Tiverton obstruct the passage of ships into its waters.

As we have before stated, Dumplings Point offers an admirable position for powerful batteries to directly oppose the approach of fleets advancing up the Middle Passage.

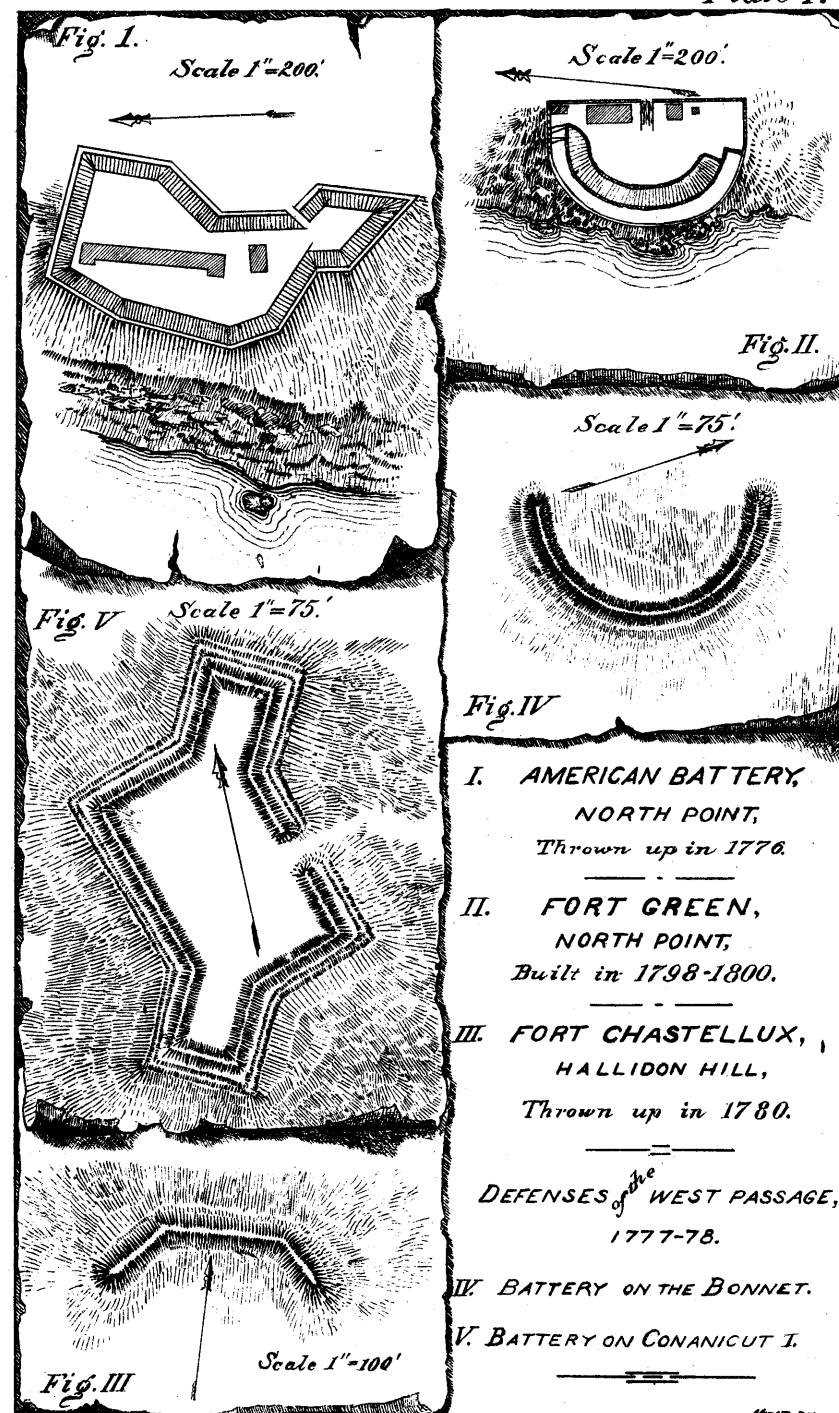
Lower down are Castle Hill and the Ridge of Conanicut Island, opposite the mouth of Mackerel Cove, both admirable sites for strong citadels, only a mile and a half apart, which distance could be lessened to a mile and a quarter between elevated batteries lining either shore, and protected by the higher enclosed works. Therefore hostile ships, proceeding up mid-channel, would be within the effective range of five-eighths or three-quarters of a mile of the heavy armament of these defenses.

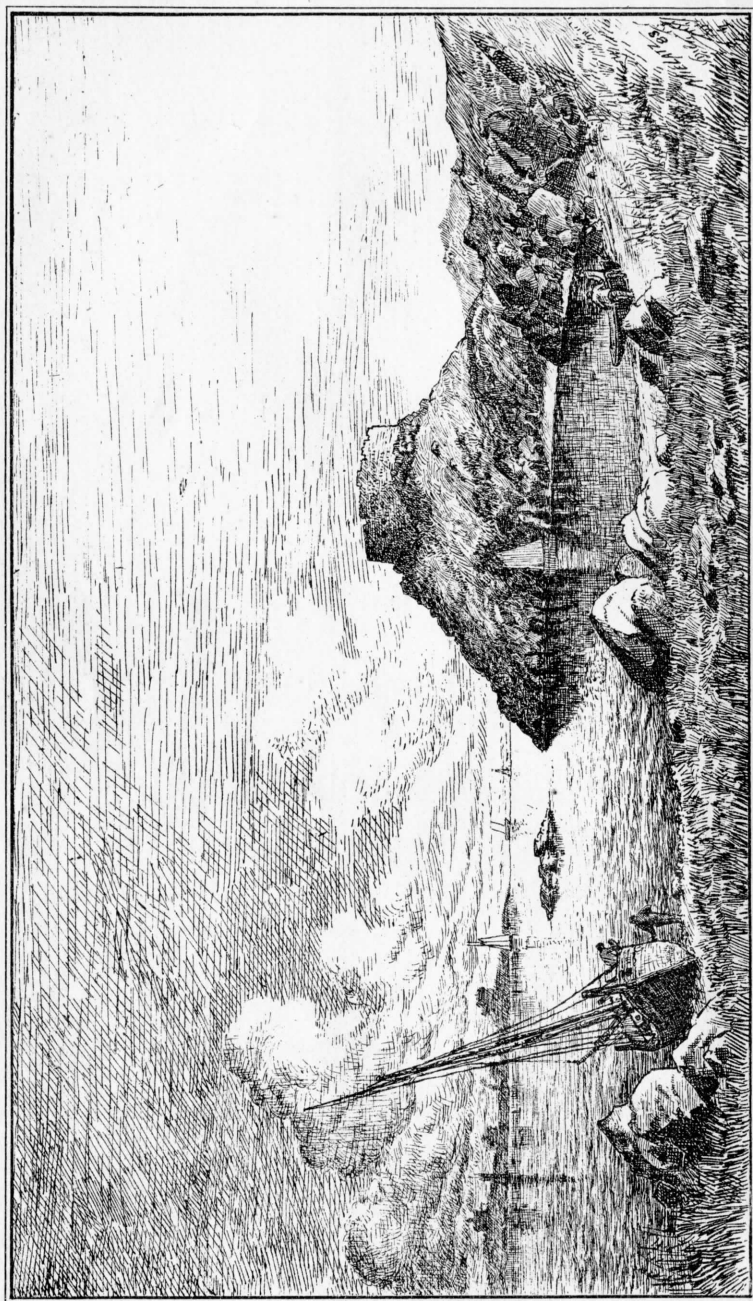
The citadel on Conanicut Island, co-operating with another at the Bonnet on the Main, with shore-batteries, would in like manner and at like distances defend the West Passage; while the fires from Dutch Island would enfilade approaching ships.

With such strong works and batteries on these several points, well armed, and aided by properly placed channel torpedoes, Narraganset Bay would be secure against the most powerfully armed fleets.

To this new system of more advanced works, Fort Adams would be a most valuable interior adjunct, not only for offense, but as a safe and defensible position wherein to keep magazines and ordnance stores, commissary and hospital supplies, and, at the same time, be a secure refuge for the sick, wounded, and non-combatants.

In concluding this Paper I must tender my most sincere thanks to Colonel Elliot, the Engineer Officer now in charge of the Defenses of Narraganset Bay, for his valuable assistance in making the measurements of the West Passage Batteries, and his great kindness in putting at my disposal the services of his draughtsman—Mr. Mielatz—who has so accurately and artistically delineated the sketches from which the map and plates, illustrating this paper, were engraved.





THE DUMPLINGS TOWER.

